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AN INVESTIGATION OF  
INDECISIVE BEHAVIOR IN STUTTERERS

by

John Charles Hotchkiss

A Thesis  
Submitted to the  
Faculty of the School of Graduate  
Studies in partial fulfillment  
of the  
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John Charles Hotchkiss

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## CHAPTER I

### THE BACKGROUND AND PURPOSE OF THE STUDY

#### Introduction

The literature on the disorder of stuttering includes many different ideas about etiology and maintaining factors. They range from theories proposing that stuttering is a reflection of some physical or psychological uniqueness to the idea that the disorder is imposed on a normal individual by people in a child's environment who erroneously identify normal dysfluencies as stuttering. One of the foremost among the more recent theories is the view that stuttering is a consequence of difficulty in resolving conflict situations that occur during speech. Johnson and Knott (13) presented one of the earliest views of this theory. They considered stuttering to be an "experience of conflict resulting from a desire to speak, operating in opposition to a desire to avoid expected stuttering". As a result of stuttering the individual develops a general inhibitory attitude towards speech. An inhibitory attitude discourages spontaneous activity. It is an inner impediment to free activity or functioning.

More recently, Sheehan (19) has become the major proponent of stuttering as a conflict phenomenon. He considers the stuttering block to be the product of a double approach-avoidance conflict situation. In a speak-

ing situation, the individual is caught between the drive to speak and bear the penalty of expected difficulty and the drive to remain silent and suffer the frustration of not communicating. When the two drives are in equilibrium, the stuttering block occurs.

These similar views propose that during a stuttering block the stutterer is experiencing conflict. He is thought to be struggling to resolve the problem of whether he should attempt to speak and bear the consequences or remain silent and suffer the penalty of not being able to express himself. He presumably has great difficulty in resolving this conflict.

The present study was concerned with the possibility that this difficulty is a reflection of a more general behavioral factor. It investigated the possibility that the problem in dealing with conflict during the stuttering block is present under other circumstances and might be indicative of a general difficulty in making decisions.

Several authors (1,2,9) have alluded to the idea that stutterers as a group are more indecisive or hesitant than nonstutterers. However, the literature reveals no research to support the view that such a difference exists. This study explored the possibility that stutterers do exhibit behavior in nonspeech situations that could be characterized as indecisive; that stutterers are more hesitant than are nonstutterers to commit themselves when faced



with situations that demand decisions.

There have been a number of studies concerning traits that may affect the manner in which stutterers resolve conflict. Eisenson (6), for example, presents the theory that stuttering can be explained as a perseverative phenomenon. He supports the view that stutterers tend to persevere in situations that do not call for overt speech. Eisenson states that a majority of stutterers speak the way they do because they are constitutionally inclined to persevere to a greater degree than most speakers. Perseveration is the tendency for a mental or motor act to persist for a time longer than normal after the stimulus which brought about the behavior is no longer present. Support for this theory is provided by studies (7, 15) which indicate that stutterers as a group tend to persevere more than normal speaking groups in a number of mental and motor tasks. This tendency for a behavior to persist for an abnormal length of time might possibly result in a delay in the resolution of a conflict situation. This delay might be interpreted as an indecisiveness in making decisions.

Some psychopathologists believe that excessive perseveration indicates a disturbance of volition. Landis and Bolles (16) speculate that perseveration occurs when the determining tendencies for a given task are blocked or diverted by inhibiting ideas or events. In this way, the

completion of a given task is hindered because the drive for goal achievement is not strong enough to overcome other resistant forces. This blocking or diverting of the determining tendencies for a given task, such as the resolving of a conflict situation, may result in what might be described as hesitant or indecisive behavior.

Behavioral rigidity is considered by some to be a significant aspect of perseveration. Goldstein (10) deals with primary rigidity which he defines as the inability of an individual to change from one train of thought to another. Cattell and Winder (4) deal with behavioral rigidity in new situations. They state that the term "rigidity" can be applied to the failure to achieve the shortest path in a new situation. These different concepts of rigidity suggest the possibility that a person exhibiting this type of behavior may be hindered in some way in the completion of a task. Again in the area of conflict situations, this might result in behavior that could be termed as indecisive. However, despite the fact that rigidity is considered by many to be one manifestation of perseveration, research has failed to prove that stutterers show more rigidity of behavior in nonspeech situations than do nonstutterers.

Evidence indicating an excessive or abnormal predisposition for perseveration among stutterers may provide one possible explanation for any abnormal indecisiveness

in making decisions.

### The Purpose of the Study

The general purpose of this study was to investigate the manner in which stutterers deal with conflict. Specifically the investigation was concerned with the existence of a general indecisive type of behavior in dealing with conflict situations.

It was hypothesized that stutterers as a group are less adept than are nonstutterers at making decisions when confronted with choices.

### Review of Related Studies

A number of studies have attempted to isolate a specific personality trait or a type of personality pattern in stutterers as a group. In a survey of the literature, Goodstein (11) attempted to summarize and evaluate those investigations in which the personality and adjustment of stutterers and their parents were measured. In all the studies included, some comparison with a control group was made. The findings tended to show no reliable evidence to indicate that either the child or adult stutterer has a personality pattern which is consistently different from that of nonstutterers. Adult stutterers did appear to have some adjustment difficulties, but they were quite different from severely maladjusted persons.

Goodstein states that there is little significant evidence to support the idea that the stutterer has a particular pattern of personality.

Sheehan (20) evaluated studies utilizing projective methods to investigate the personality of the stutterer. He reanalyzed and compared the findings of Rorschach, TAT, Picture-Frustration, Self-Concept, and Level of Aspiration studies dealing with stutterers. Except for showing a somewhat lower level of aspiration, stutterers showed no reliable differences from normal speakers. No consistent personality pattern could be found among stutterers.

A number of studies involving more specific types of behavior have been more successful in showing differences between stutterers and nonstutterers in nonspeech activities. For example, several studies have supported the view that stutterers do persevere to an abnormal degree in nonspeech situations. Eisenson (7) compared 30 male stutterers to a control group of male nonstutterers matched for age on the Mahler-Elkin Test. This instrument consisted of a series of timed subtests which required rapid changes in responding to new situations. The results indicated that the stutterers were significantly slower in the tasks than were the nonstutterers. This difficulty in adjusting to changing situations was considered to be a measure of the perseverating tendency.

An investigation by King (15) compared a group of

stutterers to nonstutterers as to the amount of perseveration exhibited on several nonspeech activities. The results showed that stutterers displayed significantly more perseverative tendencies than did nonstutterers. The most significant differences were found on the tests that required a rapid change of set for each new item.

Behavioral rigidity is considered to be one aspect of excessive perseveration. Kapos and Standlee (14) investigated the differences in rigidity between a group of stutterers and a group of nonstutterers. The two groups were tested on a two-switch electromaze and on a four-switch electromaze. Their findings indicated that in two and four-choice problem situations there were no significant differences in rigidity of responses between the stuttering and nonstuttering groups.

Solomon (22) made a comparison of the behavioral rigidity manifested by a group of stutterers with a group of "fluent" speakers. The instrument used was the Einstellung Problems devised by Dr. A. S. Luchins. These consisted of a mechanical type test, a numerical test, and an oral test. As a result of the investigation it was concluded that stutterers as a group manifested more rigidity of behavior on only the oral type of test.

Calamaras (3) investigated the differences in the degree of tolerance of ambiguity between a group of stutterers and a group of nonstutterers. The subjects ranged

in age from 10 to 17 years and were matched for IQ, race and socioeconomic level. Both groups were administered the Wilkin Embedded Figures Test, which assesses the ability to cope with complexity, and the Barron-Welsh Art Scale which determines preference for complexity and asymmetry. The results indicated that stutterers were significantly lower than nonstutterers in their ability to cope with complexity. There were no significant differences between the groups as to preference for complexity and asymmetry.

A survey of the literature reveals that research dealing specifically with indecisiveness as either a predisposing factor or an outgrowth of stuttering is virtually nonexistent. However, several authors have speculated that stutterers as a group are more hesitant than nonstutterers. Some have alluded to the idea that stuttering is merely one expression of the stutterer's general state of confusion and indecisiveness.

Barbara, for example, states that the man or woman who stutters is a chronic hesitator in other areas of life.

Stuttering, with all its blocks and hesitations, almost always represents the localized and externalized expression of a general state of indecisiveness and wavering. Before attempting to speak, the stutterer procrastinates and anxiously thinks about what he will say, how he will say it, and when. Since he cannot be spontaneous in his choice of words and speech must therefore be a conscious act, he is extremely cautious and perfectionistic in what he communicates. Even when he is quite certain that he

knows what he wants to say, his self-doubts grow, and he will be forced back into a position of indecisiveness and further hesitations. In the end he finds himself in the dilemma of either offering passive resistance and refusing to say anything at all or of involving himself by pushing himself into the speaking act (1, p. 382).

Barbara goes on to state that these many conflicting tendencies cause the stutterers to become more entangled and rebellious and result in a state of constant confusion. He concludes that the stutterer's speech follows the general direction of his state of being at the time he speaks.

Bluemel (2) presents a similar picture of the stutterer's personality. He describes the stutterer as a person who is often diffident, sensitive, self-conscious, indecisive, tense, and easily confused. Bluemel considers the stutterer to be a person that is easily frustrated and readily disorganized. He considers this type of personality to be both a predisposing trait and a result of stuttering.

An evaluation of 20 adult male stutterers' responses in a nondirective counseling situation was made by Schultz (18). A comparison was made with the responses of 239 psychoneurotics. The stutterers' chief problems were considered to be a result of being submissive, hypersensitive, inhibited, ambivalent, and introvertive. It was concluded that the stutterers in this study had many symptoms common to the psychoneurotics.

Hesitancy might be considered to be a reflection of

sensitivity. Robinson discusses the role of sensitivity in describing a certain type of stutterer. Sensitivity in its developed forms is defined as "a hyperalertness to the adequacy of one's behavior coupled with something less than normal ability to tolerate unfavorable reactions by others (17, p. 59)". Robinson states that early in the life of a child, sensitivity may cause him to be more unsure, more cautious, and more hesitant. He believes that this may be part of an underlying cause for beginning stuttering and may later become the source of advanced forms of the stuttering because of a need to avoid any questionable behavior.

In a study of the personality characteristics of young stutterers, Glasner (8) speaks of "sensitive children". He states that mothers frequently characterize their stuttering children as "sensitive" or "nervous". Glasner describes this type of child as being subject to swift mood changes and states that they over-react emotionally to almost all situations.

#### Summary and Limitations of Related Studies

A number of authors have used such terms as indecisive, hesitant, ambivalent, confused, and inhibited in describing a certain type of behavior observed in stutterers. Some consider this to be part of a psychoneurosis. Others view stuttering as merely one expression of this general



state of disorganization. Still others explain the stutterer's hesitancy as a reflection of heightened sensitivity. A cause-effect relationship is not clear. Some feel that this type of personality is a predisposing factor in stuttering. It is also suggested that this type of behavior may be an outgrowth of later stages in the development of stuttering. Robinson (17) and Bluemel (2) state that it may play dual roles, both as a predisposing factor and in advanced stuttering. Yet the only study in which a comparison was made between a group of stutterers and a group of nonstutterers utilized a control group consisting of psychoneurotics. The findings in this study (18) were gained through observations during nondirective counseling sessions. It was concluded that stutterers had many personality traits similar to those of psychoneurotics. No comparison was made with a "normal" control group. It would seem probable that a comparison between a "normal" group and a group of psychoneurotics would also result in many similar types of behavior.

It was suggested in the introduction to this investigation that both excessive perseveration and behavioral rigidity may be a part of the indecisiveness with which the study is concerned. Many studies indicate that stutterers as a group tend to display excessive perseveration in nonspeech activity when compared to a group of normal speakers. Of special significance are the studies in-

dicating that stutterers tend to slow down on tasks requiring a rapid change of set for each new situation.

While behavioral rigidity is considered to be one aspect of excessive perseveration, research has failed to show that stutterers as a group are more rigid in non-speech activities than are nonstutterers.

There is some evidence that stutterers as a group have less tolerance for ambiguity. It is felt that this might be one reflection of indecisiveness or hesitancy.

Because of the lack of any clear cut evidence that stutterers as a group differ from normal speakers as to this type of indecisive or hesitant behavior, it was felt that further investigation in this area should be undertaken.

#### Statement of the Problem

The primary purpose of this study was to investigate the manner in which stutterers resolve nonspeech conflict situations. It was hypothesized that the stuttering group would demonstrate more difficulty in making decisions than do nonstutterers. Thus, they would take longer to select possible solutions to hypothetical problem situations, and the solutions chosen would be selected less decisively. The following questions were asked:

1. Do stutterers differ from nonstutterers in the decisiveness with which they select possible solutions to hypothetical problem situations?

2. Do stutterers differ from nonstutterers in the time required to select possible solutions to hypothetical problem situations?

## CHAPTER II

### THE SUBJECTS AND PROCEDURES

The purpose of this chapter is to present information about: 1) the subjects used in the study, 2) the test material, 3) the administration of the test, and 4) the tabulation and treatment of the collected data.

#### Subjects

The subjects who participated in this study were 21 adult male stutterers, who served as the experimental group, and 21 adult male nonstutterers, who served as the control group. The subjects in the experimental group were contacted through college speech clinics. Subjects in the control group were selected in and around the Kalamazoo area. More than half of the subjects in this group were enrolled in the Speech Pathology and Audiology department at Western Michigan University. All subjects in both groups were naive with respect to the purpose of the study.

The age range for the stuttering group was 16 years to 37 years with a mean age of 24 years. For the control group the ages ranged from 16 years to 31 years with a mean age of 23 years. In all but three cases, the subjects in the two groups were matched within one year

of age. In the three exceptions, the subjects fell in the 30 to 36 year age group. Subjects were matched for age because it was felt that the number and variety of conflict situations with which the subjects had been faced might affect the way they responded on the test. If life is indeed a series of conflicts, the amount of experience one has had in dealing with conflict situations should be reflected in great part by his age.

All subjects in the experimental group had received speech therapy or were presently enrolled in some type of therapy. All were still experiencing varying degrees of difficulty with their speech at the time of the testing.

#### The Testing Instrument

A test was devised which consists of 29 hypothetical problem situations in which a choice must be made between two alternate solutions to the problem (Appendix A). The following example is one of the test items.

You have a choice of two jobs. One of the jobs will be interesting and enjoyable while the other job offers more opportunity and more money. You would take the second job.

The test items were constructed so that the alternate solutions to the situations have both negative and positive values. The items described situations that could possibly occur or might already have occurred to any of the subjects. For the most part, the items were constructed

so that a stuttering problem per se should not have any affect on the choice. That is, all but three of the items (items 7, 10, and 27) described situations in which speech was not necessarily involved in any of the possible solutions.

The subjects were directed to respond to each test item on a seven point rating scale, indicating the degree to which they agreed or disagreed with the suggested solution to the situation. The rating scale was presented in the following manner.

#### Rating Scale

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Undecided	Slightly Agree	Agree	Strongly Agree

For each of the test items the subject was instructed to circle one number indicating his reaction to the suggested solution.

#### The Administration of the Test

The test items and instructions in this investigation were presented on a tape recorder. The following instructions were played first.

For this test you will be asked to respond to 29 questions. Each question consists of a situation in which you should try to imagine yourself. You are to respond by circling a number on the answer sheet for each question indicating the amount to which you agree or disagree with the question. It is very important that you consider each question carefully and respond in a manner that indicates how you actually feel you would act in each situation. Now, look

at the answer sheet carefully so that you understand how it works. At the end of each question the recorder will be stopped. Then answer carefully. When you have finished each question, raise your hand immediately and the next item will be played. The recorder will now be stopped in order that you may ask any questions concerning the instructions. Important! Once the test has begun, no questions can be answered. Just answer each question the best you can with only the information given. Remember, no questions can be answered once the test has begun. Please don't attempt to ask any questions.

At this point the recorder was stopped and the subject was asked if he had any questions. The test situations were then played with the recorder being stopped at the end of each item to allow the subject time to respond on the answer sheet. When the subject raised his hand, indicating that he had completed his response to the question, the next item was played.

The entire presentation of the test questions and the pauses for the subject's responses were timed. In order to determine the individual's total response time for the 29 items, the time required for the presentation of the test items without any pauses was subtracted from the time required to administer the test, including the individual responses, to the subject. It was felt that this would be a more accurate assessment of the subject's response time because of the difficulty involved in attempting to time each individual response.

## The Tabulation and Treatment of the Collected Data

The individual response time for each subject was computed and can be found in Appendix B. The significance of the difference between group means was determined through the use of the  $t$  test.

A decisiveness value was assigned to each answer. A response of strongly agree or strongly disagree was given a decisiveness value of three. Responses of agree and disagree were assigned a decisiveness value of two. Responses of slightly disagree and slightly agree were assigned a decisiveness value of one, and a response of undecided was given a value of zero. Thus, a high decisiveness score would indicate greater decisiveness in answering a test item.

A decisiveness score was compiled for each subject by totaling the decisiveness values for each response to the test items. In order to avoid the necessity of any assumption that the decisiveness scores represented a scale any more refined than a simple ordinal scale, the decisiveness scores of the two groups were compared by means of the median test described by Siegel (21).



### CHAPTER III

## RESULTS AND DISCUSSION

### Results

The individual scores for each of the subjects on the two criterion measures, response time and decisiveness, were tabulated and presented in Appendix B.

The response times for the experimental group ranged from 69 seconds to 582 seconds with a mean response time of 221 seconds. The control group response times ranged from 72 seconds to 276 seconds with a mean response time of 146 seconds. The standard deviation in response times was 114 seconds for the experimental group and 48 seconds for the control group.

The significance of the differences between the response times of the two groups was tested by use of a t test. The difference between the two groups ( $t = 2.79$ ) exceeds the difference required for statistical significance ( $t_{.01(df=20)} = 2.53$ ), indicating that stutterers as a group took longer to complete the test items. The differences in response times between the two groups are presented graphically in Figure 1.

The decisiveness scores for the experimental group ranged from 35 to 77 with a mean decisiveness score of 50.3. The control group decisiveness scores ranged from

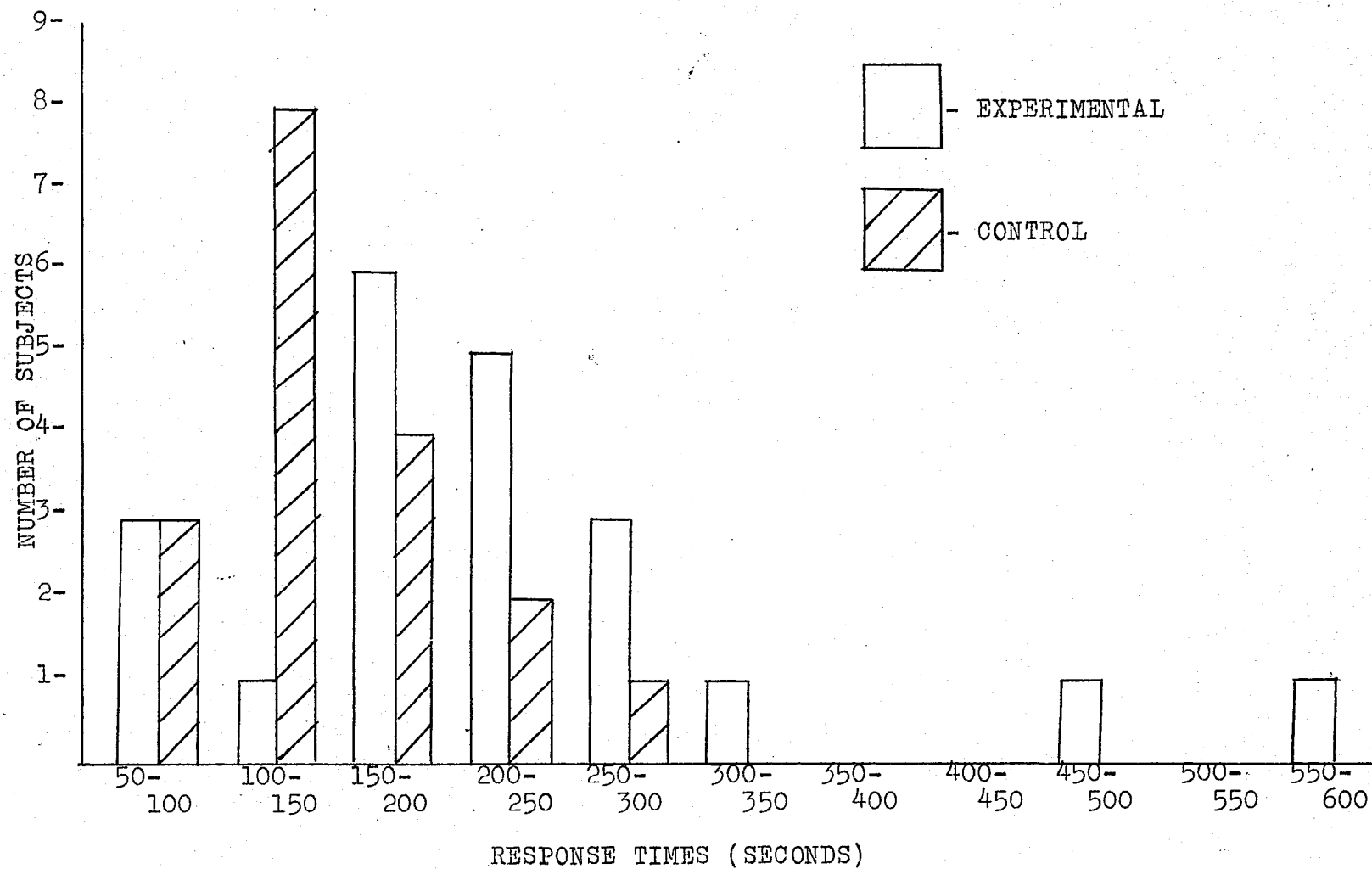


Figure 1. A comparison of total response times for the control and experimental groups.

36 to 66 with a mean score of 53.6. The standard deviation in decisiveness scores was 11.4 for the experimental group and 7.8 for the control group.

A combined median was computed for both groups, and the difference between the two groups was tested by the use of a median test described by Siegel (21). A Chi-square value of 6.29 ( $\chi^2_{.01 (df=1)} = 5.41$ ) was found, indicating that the experimental group was significantly less decisive in responding to the test items than was the control group. The differences between the two groups with respect to this criterion are presented graphically in Figure 2.

In order to examine the relationship between the response times and decisiveness scores for each group, Pearson product-moment coefficients of correlation were computed. The coefficient of correlation indicates the extent to which values of one variable may be predicted from known values of another variable. The correlation between the two criteria for the experimental group ( $r = -.22$ ) was not significant ( $r_{.05(n=21)} = .43$ ). The relationship between the two criteria for the control group ( $r = -.04$ ) was also not significant. The relationships between response time and decisiveness are presented graphically in Figure 3 and Figure 4.

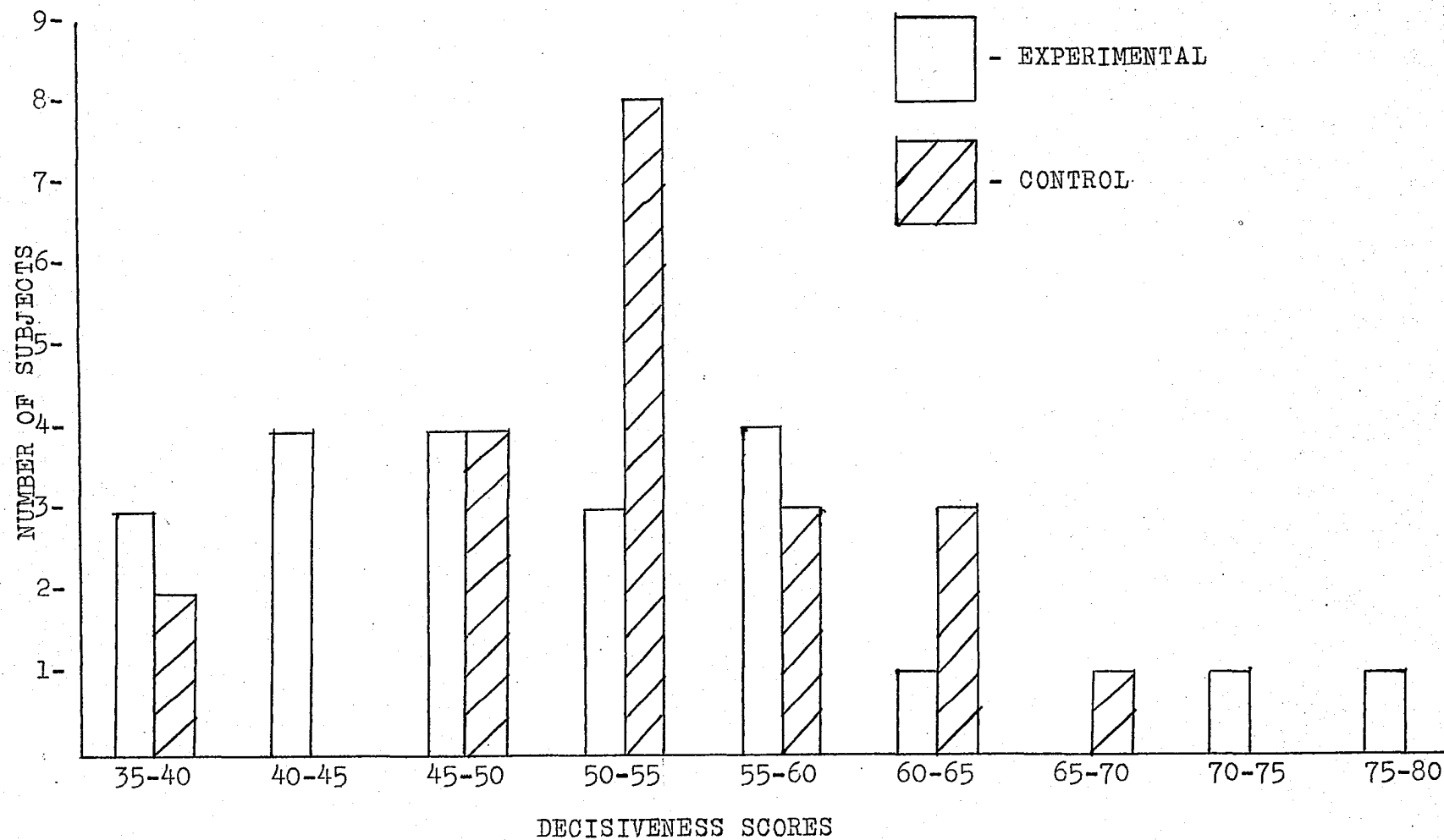


Figure 2. A comparison of decisiveness scores for the control and experimental groups.

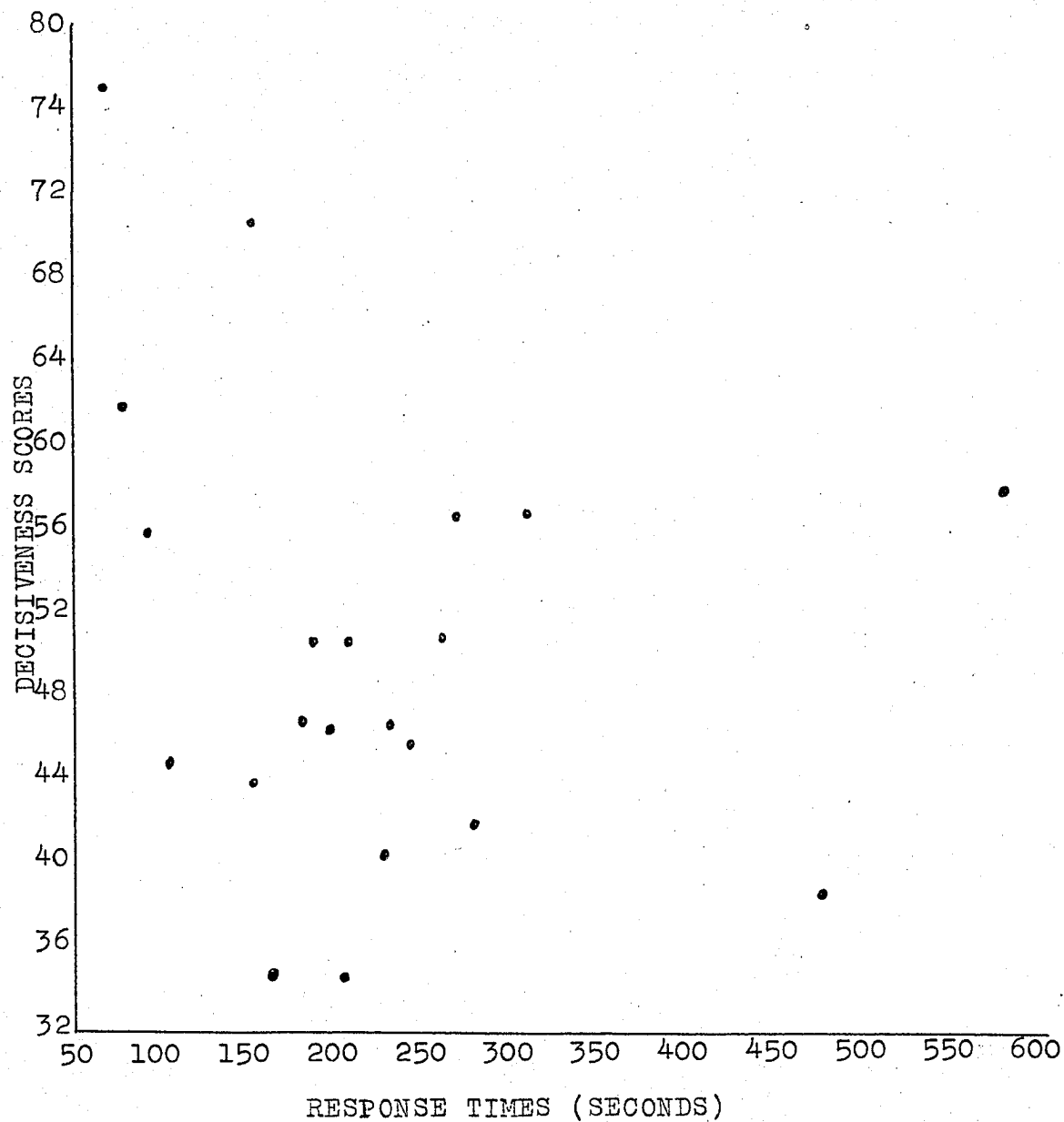


Figure 3. Scatter diagram of the relationship between response times and decisiveness scores for the experimental group.

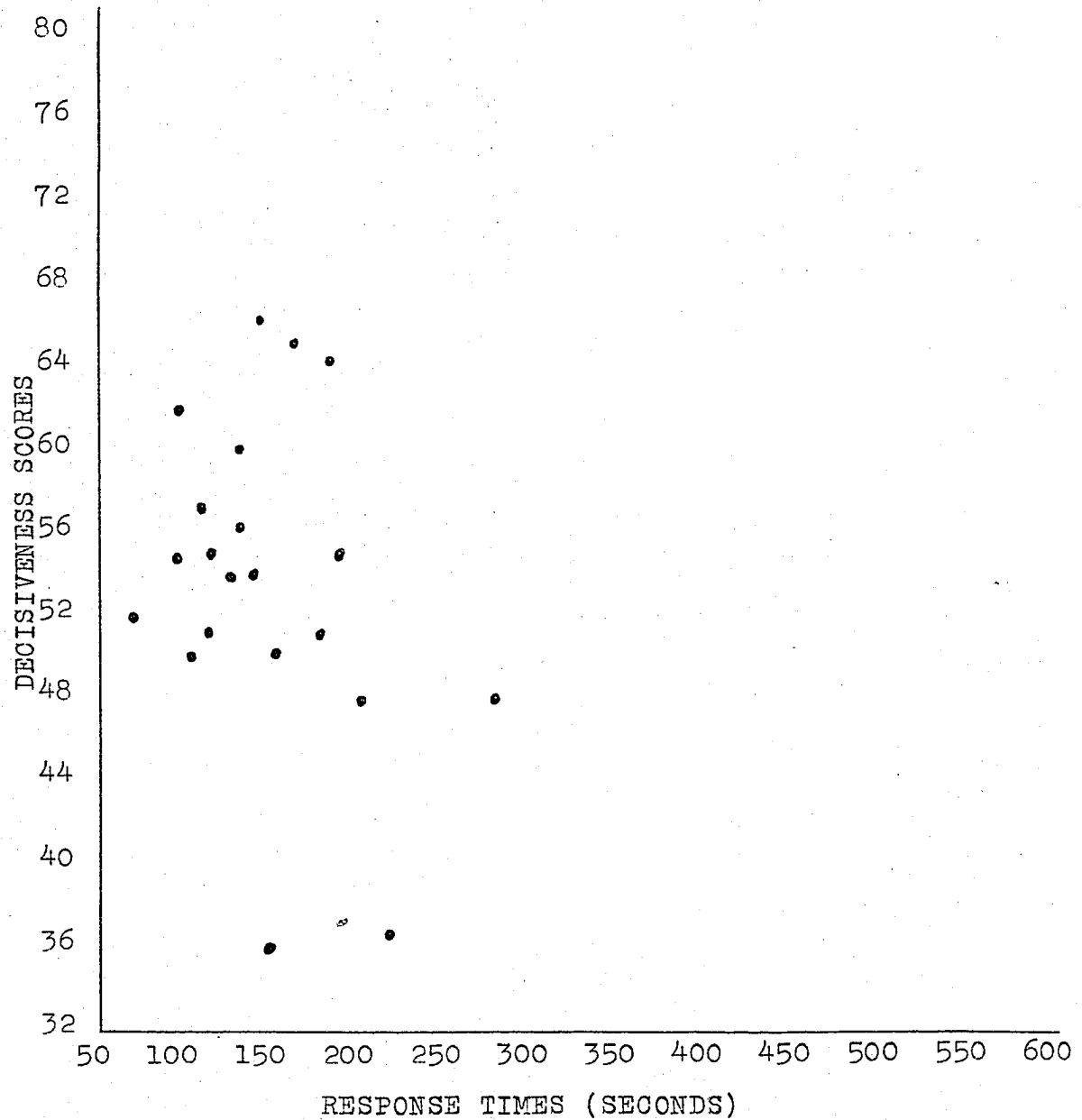


Figure 4. Scatter diagram of relationship between response times and decisiveness scores for the control group.

## Discussion

The statistical treatment of the response times of the two groups indicates that the stutterers took a significantly longer time to respond to the test items than did nonstutterers. This suggests that the subjects in the experimental group experienced relatively greater difficulty in resolving the test situations.

The statistical treatment of the decisiveness scores for the two groups shows that the stuttering group was significantly more indecisive in resolving the test situations as measured by their responses. This difference also reflects more difficulty on the part of the stutterers in dealing with the test situations.

The difference in decisiveness of the responses might be viewed as raising some question about stutterers' assumed intolerance of ambiguity. In the view of Hamilton's (12) assertion that a tendency to more extreme responses is inversely related to an individual's tolerance of ambiguity, one might expect more decisive scores to have appeared among stutterers than among nonstutterers. The opposite tendency was in fact observed.

The findings of this investigation support the view that stutterers as a group differ from nonstutterers in certain areas of nonspeech behavior. While the study does not prove the existence of these differences, it

makes the possibility that differences do exist highly tenable.

It was observed during the test situation that the subjects in the stuttering group tended to take the task more seriously. They tended to smile less, exhibited more perplexed expressions, and attempted to ask more questions. Following the test the stutterers tended to express more frustration over the test questions. Of course these are highly subjective observations, but this type of behavior might very possibly have affected the test results. This behavior also may have been a reflection of hypersensitivity in stutterers.

It should be noted that the standard deviation of response times for the stuttering group is more than twice as large as for the control group. This reflects the large amount of variance found among the stuttering group for this criterion. Possibly this variance might be related to the type of stuttering exhibited, the amount of previous therapy, or the type of therapy obtained. Further investigation is needed in this area.

Specifically, the differences indicated by this investigation reflect a difference in the manner in which the two groups resolved conflict situations presented in the test instrument. These differences support the view that stutterers as a group differ from nonstutterers in certain types of nonspeech behavior. The findings in



this investigation might be interpreted as one indication that stutterers present a personality that is more hesitant, more indecisive, and more ambivalent than nonstutterers and that stuttering behavior may be one manifestation of a more general personality problem. A causal relationship has been demonstrated in neither direction.

The findings in this investigation suggest possible implications for therapy. Since many speech pathologists feel that personality must be considered in both the diagnosis and treatment of stuttering, any information about differences in nonspeech behavior among stutterers as a group should be of value. If indeed the difficulty observed during a stuttering block is part of a more general problem involving an indecisive type of personality, then therapy might necessarily take into account certain types of nonspeech behavior. Possibly the scope of therapy should include helping the stutterer to examine and better deal with indecisiveness in his everyday living.

## CHAPTER IV

### SUMMARY AND CONCLUSIONS

Several authors have stated that during a stuttering block, the stutterer is experiencing a double approach-avoidance conflict. He is struggling between the drive to speak and bear the penalty of stuttering or to remain silent and not be able to express himself. It has been suggested that stuttering may be merely one expression of the stutterer's general state of mind, and that the observed struggle during a stuttering block is a reflection of an indecisiveness and hesitancy that may be observed in non-speech activities. The purpose of this study was to investigate the possibility that stutterers are more indecisive than nonstutterers in the manner in which they resolve hypothetical conflict situations.

A group of stutterers was compared to a group of nonstutterers on a test instrument consisting of 29 hypothetical double approach-avoidance situations in which one means of resolving the situation is suggested. The subjects were to respond to each item, indicating the amount to which they agreed or disagreed with the suggested solution. The total response time and a decisiveness score were computed for each subject. These two criteria were considered to be measures of the amount of difficulty experienced in responding to the test items.

Significant differences were observed between the two groups for both decisiveness scores and total response times. As a group, the stutterers were less decisive in their responses and took longer to answer the items than did the nonstutterers. These findings suggest that the stuttering group experienced more difficulties in resolving the conflict situations.

It is concluded that the findings of this study support the view that stutterers as a group differ from nonstutterers in certain types of nonspeech behavior. The results suggest that whatever difficulty stutterers may experience in dealing with speaking conflicts may not be limited to speaking situations. Literature alluding to the possibility that stutterers exhibit personalities characterized by hesitancy and indecisiveness is given supportive evidence.

The great amount of variance of response time observed in the stuttering group indicates the need for further research among different groups of stutterers along this dimension. The relationship between performance on this type of task and the type of stuttering exhibited warrants further investigation. Also, the relationship between the findings of this study and possible etiological or maintaining factors in the problem of stuttering is left totally unexplored.

## BIBLIOGRAPHY

## BIBLIOGRAPHY

1. Barbara, Dominick A., The psychodynamics of stuttering. In Psychological and Psychiatric Aspects of Speech and Hearing. Edited by D. A. Barbara. Illinois: Thomas Books, 1962, 363-384.
2. Bluemel, C. S., The Riddle of Stuttering. Illinois: Interstate Publishing Co., 1957.
3. Calamaras, Peter, An investigation of the degree of tolerance of ambiguity of male stutterers ranging in age from ten to seventeen years. PhD. thesis, Pennsylvania State University, 1961.
4. Cattell, R. B., and A. E. Winder, Structural rigidity in relation to learning theory and clinical psychology. Psychological Review, 54, 1952, 23-39.
5. Chowm, Sheila M., Rigidity: a female concept. Psychological Bulletin, 56, 1959, 195-223.
6. Eisenson, Jon, A perseverative theory of stuttering. In Stuttering: A Symposium. Edited by Jon Eisenson. New York: Harper and Brothers, 1958.
7. Eisenson, Jon, A note on the perseverating tendency in stutterers. Journal of Genetic Psychology, 50, 1937.
8. Glasner, Philip J., and David Rosenthal, Parental diagnosis of stuttering in young children. Journal of Speech and Hearing Disorders, 22, 1957, 288-295.
9. Glasner, Philip J., Personality characteristics and emotional problems in stutterers under the age of five. Journal of Speech and Hearing Disorders, 14, 1949, 135-138.
10. Goldstein, K., Concerning rigidity. Characteristics and Personality, 11, 1943, 209-226.
11. Goodstein, Leonard D., Functional speech disorders and personality: a survey of the research. Journal of Speech and Hearing Research, 1, 1958, 359-369.

12. Hamilton, David L., Personality attributes associated with extreme response style. Psychological Bulletin, 69, 1968, 192-203.
13. Johnson, Wendell and John R. Knott, A systematic approach to the psychology of stuttering. In Stuttering in Children and Adults. Edited by Wendell Johnson. Minneapolis: University of Minnesota Press, 1955.
14. Kapos, Ervin and Lloyd S. Standlee, Behavioral rigidity in adult stutterers. Journal of Speech and Hearing Research, 1, 1958, 294-296.
15. King, P. T., Perseverating factors in a stuttering and non-stuttering population. PhD. dissertation, Pennsylvania State University, 1953.
16. Landis, C., and M.M. Bolles, Textbook of Abnormal Psychology. New York: Macmillan, 1950.
17. Robinson, Frank B., Introduction to Stuttering. New York: Prentice-Hall, 1964.
18. Schultz, Donald A., A study of nondirective counseling as applied to adult stutterers. Journal of Speech Disorders, 12, 1947, 421-427.
19. Sheehan, Joseph, Conflict theory of stuttering. In Stuttering: A Symposium. Edited by Jon Eisenson. New York: Harper and Brothers, 1958.
20. Sheehan, Joseph, Projective studies of stuttering. Journal of Speech and Hearing Disorders, 23, 1958, 18-25.
21. Siegel, Sidney, Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.
22. Solomon, Nancy D., A comparison of rigidity of behavior manifested by a group of stutterers compared with 'fluent' speakers in oral and other performances as measured by the Einstellung Effect. Speech Monographs, 19, 1952, 198.

**APPENDIX A**

## TEST ITEMS

1. You have decided to buy a suit. There is a suit you like very much for \$80 and one you like but not quite as much on sale for \$60. You would buy the suit for \$60.
2. You bump into a car in a parking lot and do some minor damage. Nobody saw you but it was a new car. You would stop and leave your name for the owner.
3. At a gas station they sell gasoline for 30.9 and 35.9 cents a gallon. You get the same mileage with both, but the more expensive is probably better for the car. You would buy the more expensive gasoline.
4. Planning a trip, you find there are two different routes. One would be the most pleasant route, but the other would get you to your destination faster. You would take the faster route.
5. You are at a restaurant for dinner. They have a special dish that they are famous for, but there is something else on the menu that you would probably order elsewhere. You would order the special dish.
6. While taking a test, you notice that another student is cheating. You know the student is having a hard time in the class, but the test is marked on a class average and so his cheating may affect others' grades. You would do nothing about it.
7. A friend gives you a shirt for your birthday. You



don't like the color and probably wouldn't wear it, but in order to return it you would have to ask your friend where it was purchased. This way he would know you didn't like it. You would not return the shirt.

8. While hurrying to an appointment, you notice that you're getting a flat tire. If you stop to change it you will be late for the appointment, but if you don't stop you may ruin the tire. You would stop and fix the tire.
9. You are on your way to work and notice you have left something behind that you may need. If you go back after it, you will probably be late for work. You would go back after it.
10. You have run out of gas at a busy intersection. If you stay there your chances are better for getting a ride, but if you begin walking you are assured of getting to a gas station. You would begin walking.
11. You are given too much change at a store but don't discover it until you are a block away. You would take the money back.
12. You have a choice of two jobs. One of the jobs will be interesting and enjoyable while the other job offers more opportunity and more money. You would take the second job.
13. You come to a fork in the road. One seems to head

in the direction of your destination, but the other looks more like the main road. There are no signs. You would take the main road.

14. You are at a party and some food is spilled on the front of your clothes. You don't want to go home and change your clothes, but it does make you uncomfortable. You would go home and change.
15. You are watching the last ten minutes of an interesting television show when guests arrive at the door. you don't want to be rude, but you are interested in the show. You would turn off the set.
16. When leaving a restaurant you find that someone has taken your new overcoat. You notice that there is another coat almost identical to your's. This coat probably belongs to the person that took your coat. You are leaving town the next day. You would take the coat.
17. After looking at the menu in a restaurant, you decide that there is nothing you really want. You would get up and leave.
18. You are eating an ice cream cone on a very hot day. It begins to melt and drip. You want the cone, but to finish it would mean getting ice cream all over your hands. You would throw the cone away.
19. You have started on a weekend trip and discover that you have left behind your license and car registration.

You would not go back after them.

20. A letter that is for a person that lives four blocks up the street is placed in your mail box. It would be easier to put the letter back in the box for the postman, but it might be important. You would deliver the letter personally.
21. You are looking for an apartment. There is one that is close to where many of your friends live. Another apartment is much closer to where you work, which will save 45 minutes a day driving, but you know no one in the area. You would take the apartment close to where you work.
22. You answer the phone and a lady begins asking you questions. You realize this is a sales pitch for something you don't want and can't get rid of the caller. You would hang up the phone.
23. You find something on sale that you want for your home but aren't sure if the measurements are right. If you go home to check, it might be sold. You would take the chance and buy it.
24. A salesman comes to your door and wants to come in and talk to you. You aren't interested in his product, but he seems very nice. You would let him come in and talk.
25. There is a tree in your front yard that you like very much, but it is interfering with the sewage line. You

would not cut down the tree.

26. You are friendly with your neighbors but don't like having their dog in your back yard all the time. A fence would solve the problem, but you are afraid it would offend the neighbors. You would put up a fence.
27. You pick up your date for a party and notice that her slip is showing. You aren't sure that it's any of your business, but it might embarrass her at the party. You would not say anything.
28. Some friends take you out to dinner. You know it is a big expense for them but think they might be insulted if you ordered something inexpensive. You would order something expensive.
29. You want to run across the street to the store. It's raining and you have no umbrella. You don't want to get wet but don't know when the rain will stop. You would wait for the rain to stop.

## APPENDIX B

# INDIVIDUAL RESPONSE TIMES AND DECISIVENESS SCORES

EXPERIMENTAL				CONTROL		
Subj.	Age	Response Time (seconds)	Decisive- ness Score	Age	Response Time (seconds)	Decisive- ness Score
1	16	225	41	16	148	36
2	17	239	46	17	137	54
3	18	80	62	18	176	51
4	18	259	51	18	181	55
5	21	268	57	21	94	55
6	21	227	47	21	101	50
7	22	184	47	21	72	52
8	22	69	77	22	96	62
9	23	151	44	22	129	60
10	23	107	45	22	143	66
11	23	203	35	23	219	37
12	24	92	56	23	202	48
13	24	280	42	23	180	64
14	24	160	71	25	111	51
15	24	471	39	25	126	56
16	25	184	51	26	152	50
17	27	191	47	27	114	57
18	27	307	57	28	124	54
19	33	161	35	30	114	55
20	34	210	51	31	164	65
21	37	582	56	31	276	48